

IEEE POWER & ENERGY SOCIETY / SUBSTATIONS COMMITTEE



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2011 – 2012 Officers

JTCM January 2013 Meeting, Memphis, TN

Tuesday, 1/15/12 9:30AM

C3: IEEE C37.1 Standard for Supervisory Control And Data Acquisition (SCADA) and Automation Systems

Chair: C. Preuss

Vice Chair:

Secretary: Vacant

Output: Standard

| Name | Company | Web | M/G |
|--|---------------------------|-----|-----|
| Alan Bishop | RuggedCom | N/A | M |
| Jim Evans | | N/A | CM |
| Craig Preuss | Black & Veatch | N/A | M |
| Jim Bougie | ABB | N/A | M |
| Mark Lacroix | Hydro-Quebec Distribution | N/A | M |
| Mason Clark | DAQ | N/A | CM |
| Rick Liposchak | Power Engineers | N/A | G |
| Scott Mix | NERC | N/A | G |
| Mike Dood | SEL | N/A | M |
| Tim Tibbals | SEL | N/A | G |
| Tyler Stinson | Xcel Energy | N/A | M |
| M: Member (re) request G: Guest CM: Corresponding member | | | |

Agenda

Call to Order

Review patent slides

C0 Meeting Notes

Review copyright slides

Presentations

Old Business

New Business

Next Meeting

Adjourned

Old Business

1. Finally received access to IEEE Definitions database
2. Finally had 123Signup attachment problem fixed
 - a. Sent out copies of 2030
 - b. Sent out copies of C37.1
3. Obtained definitions of DA and DMS from smart distribution working group

Establishment of Quorum

There were only 5 of 12 members in attendance.

New Business

- 1) Discovered IEC TR 62351-10:2011
 - a) "Power systems management and associated information exchange – Data and communications security – Part 10: Security architecture guidelines"
 - b) Provides the application of TC 57 (+1 DNP3) protocols to the EPS (Figure 5)
 - c) References NIST IR 7628 logical interface categories and maps them to the IEC TC 57 reference architecture (Table 3)
 - d) Does not specifically address the NIST IR 7628 "spaghetti diagram", only uses the TC 57 reference architecture and references old IEC 62357 (-1 in 2012)
- 2) Revisit the PAR
 - a) Approved September 2011
 - b) Submittal for initial sponsor ballot September 2014
 - c) Project completion submittal to RevCom May 2015
 - d) How to get done in 20 months?
- 3) Work to be tabled and not addressed in this revision
 - a) More on alarm management (Bill Hollifield in ISA)
 - i) ISA SP-18 Alarm Management committee
 - ii) ISA SP101 HMI committee
 - iii) The Alarm Management Handbook, 2nd Edition, © PAS 2009
 - iv) The High Performance HMI Handbook, © PAS 2008
 - v) The ISA book: Alarm Management: A Comprehensive Guide, © ISA 2011
 - vi) The Electric Power Research Institute (EPRI) guideline on Alarm Management, released in 2008.
 - b) Add better reference to serial port characteristic requirements

C0 Meeting Notes

- 4) Work to be addressed with first draft complete for working group review by May meeting

| TOPIC | Writer |
|---|------------------------------|
| Interfaces | Craig Preuss |
| How should IEDs handle multiple masters and specifically controls (different form of redundancy – both pri/bu always active)? | Marc LaCroix and Alan Bishop |
| Logging of high speed data and careful use of OPC (DA versus “newer OPC stuff”) | Alan Bishop |
| USB (and other existing technologies that have emerged since 2007??) General discussion of USB ports and how they may be used The ruggedness of USB | Jim Bougie |
| HMI ergonomics - Colors used for graphics on screens | Marc LaCroix |
| Does C37.1 handle RTD and thermocouple performance requirements and general hardware overview | Jim Evans |
| Testing procedures for factory acceptance and site acceptance testing | Craig Preuss |
| Overall reference to other standards. Reference guide to some of the commonly used standards that apply to SA, IEEE 525, 1615, 1613 in a way that is just not a reference. | Craig Preuss |
| System point count and handling | Marc LaCroix |
| Cable handling reference to updated 525 (already being worked on) | N/A |
| Difference between a substation gateway and server? (simple edit) | Simple edit? Done by all. |

- 5) How does 1613.1 impact C37.1? Discussed that perhaps 1613.2 for requirements. Jim Evans agreed to look at hypothetical version of C37.1.1 Craig previously completed to see if it covers what is left.

Future meetings

- 1) May 2013: Substations Annual meeting in Pittsburgh, PA
- 2) September 2013: Joint with PSRC in Albuquerque, New Mexico